

Erma,

I had to use controlled vocabulary (/CT) on this search,
because I wasn't getting good results with text searching.

=> d his

(FILE 'HOME' ENTERED AT 10:22:00 ON 25 JUL 2002)

FILE 'HCAPLUS' ENTERED AT 10:22:09 ON 25 JUL 2002

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L1      QUE SUBSTRAT? OR BASE# OR SUBSTRUCT? OR UNDERSTRUCTUR? OR FOUND
L2      318489 S LAMIN? OR LAMEL? OR MULTILAYER?
L3      QUE FIBER? OR FIBR? OR FILAMENT? OR THREAD? OR STRAND? OR RIBBO
L4      QUE FABRIC? OR TEXTILE? OR CLOTH? OR YARN? OR NAPER? OR DRAPER?
L5      818551 S CELLULOS? OR PAPER? OR WOOD?(2N) PULP?
L6      191794 S WOOL? OR JUTE? OR HEMP? OR COTTON? OR LINEN? OR RAMIE? OR RAY
L7      1833722 S POLYMER## OR HOMPOLYMER## OR COPOLYMER## OR TERPOLYMER## OR R
L8      4675 S DYE?(3N) TRANSFER?(3N) INHIBIT? OR (TRANSFER? OR DYE?) (3N) INHIB
L9      120 S FUGITIVE?(2N) DYE?
L11     QUE SURFACT? OR BIOSURFACT? OR HYDROTROP? OR DETERG? OR ABSTERG
L12     97545 S (AMIN? OR AMID? OR PYR? OR IMID? ) (4N) L7
L13     235871 S CROSSLINK? OR CROSS(W) LINK?
L14     77435 S EPICHLOROHYDRIN? OR EPIFLUOROHYDRIN? OR EPIBROMOHYDRIN? OR BI
L15     61285 S ?EPOXIDE?
L16     133496 S L14 OR L15
L17     1272849 S POLYMERIZ? OR POLYMERIS? OR POLYM# OR CURE# OR CURING# OR DIG
L18     QUE FILM? OR THINFILM? OR LAYER? OR OVERLAYER? OR OVERLAID? OR
L19     QUE MIX? OR BLEND? OR ADMIX? OR COMMIX? OR COMPOSIT? OR COMPN#
L20     88990 S L1 AND L2
L21     21141 S L20 AND L3
L22     15602 S L20 AND L4
L23     1135 S L20 AND L6
L24     9857 S L20 AND L5
L25     30503 S L20 AND (L3 OR L4 OR L5 OR L6)
L26     12039 S (DYE? OR SOIL? OR DIRT? OR GRIME?) (3A) (SCAVENG? OR SEQUESTER?
L27     16789 S L8 OR L9 OR L26
L28     23 S L25 AND L27
L29     96277 S DETERGENT? OR LAUNDRY? OR DETERSIV?
L30     1 S L28 AND L29
L31     1 S L28 AND L11

      E NONWOVEN?(2W) FABRIC?+BT/CT
      E NONWOVEN FABRICS+BT/CT
L32     7 S NONWOVEN FABRICS/CT (6N) (DYE?(2N) (ABSOR? OR ADSOR?))
L33     34 S DETERGENTS/CT (6N) (DYE?(2A) (ABSOR? OR ADSOR?))
      E DYES+BT/CT
L34     2359 S DYES/CT (6N) (TRANSFER?(2A) (INHIBITOR?) OR DYE?(4N) (ABSORB? O
L35     83 S ABSORBENTS/CT (6N) (DYE)
L36     1 S MULTILAYERS/CT (10N) DYE?(2N) SCAVENG?
      E MULTILAYERS+BT/CT
L37     31 S MULTILAYERS/CT (10N) DYE?
L38     8 S L37 AND FABRIC?
L39     372 S L34 AND (46/SC,SX OR 40/SC,SX OR 43/SC,SX)
L40     85 S DYES/CT (6N) (TRANSFER?(2A) INHIBITOR?)
L41     77 S L40 AND (46/SC,SX OR 40/SC,SX OR 43/SC,SX OR 36/SC,SX OR 37/S
L42     5 S L32 AND (46/SC,SX OR 40/SC,SX OR 43/SC,SX OR 36/SC,SX)
L43     19 S L33 AND (46/SC,SX OR 40/SC,SX OR 43/SC,SX OR 36/SC,SX OR 37/S

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L44 25 S L35 AND (46/SC, SX OR 40/SC, SX OR 43/SC, SX OR 36/SC, SX OR 37/

FILE 'HCAPLUS' ENTERED AT 11:49:31 ON 25 JUL 2002

L45 49 S L41 AND L7
L46 48 S L45 AND L11
L47 22 S L46 AND L12
L48 6 S L47 AND L13
L49 4 S L46 AND L16
L50 46 S L40 AND (L3 OR L4 OR L5 OR L6)
L51 46 S L45 AND (DETERGENT? OR DETERSIV?)
L52 6197 S NONWOVEN FABRICS/CT
L53 1 S L51 AND L52
L54 1 S L40 AND L52
L55 3 S L39 AND L52
L56 4 S L34 AND L52
L57 11 S L48 OR L49 OR L53 OR L54 OR L55 OR L56
L58 16 S L47 NOT L57

=> d L57 1-11 cbib abs hitind

L57 ANSWER 1 OF 11 HCAPLUS. COPYRIGHT 2002 ACS
2002:315061 Document No. 136:327420 Laundering aid and article, its
preparation, and use for preventing dye transfer to fabric. Panandiker,
Rajan Keshav; Aouad, Yousef Georges; Randall, Sherri Lynn; Wertz, William
Conrad (The Procter & Gamble Company, USA). PCT Int. Appl. WO 2002033040
A1 20020425, 41 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK,
DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
MD, RU, TJ; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI,
FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR.
(English). CODEN: PIXXD2. APPLICATION: WO 2001-US42687 20011012.
PRIORITY: US 2000-PV240320 20001013.

AB A laundry additive article comprises an insol. (crosslinked)
polymeric amine dye absorber (or
anion exchanger) phys. adhered to an insol. substrate, e.g. nonwoven. The
insol. **polymeric amine dye absorber**
is **dye-selective**, preferentially binding fugitive dyes in a wash
soln., rather than **detergent** components or fabrics. The laundry
additive article may comprise addnl. components including a dye
transfer inhibitor and a signal to visually indicate
that fugitive dyes were scavenged. Amberlite IRA 35 was an example of a
dye absorber, which could be affixed to a two ply web.

IC ICM C11D017-04

ICS C11D003-37; C11D003-00

CC 46-5 (Surface Active Agents and Detergents)
Section cross-reference(s): 40

ST nonwoven bound **polymeric amine dye**
absorber; web bound **polymeric amine**
dye absorber; laundering aid **polymeric**
amine dye absorber

IT Dyes

(absorbers and transfer inhibitors;
polymeric amine dye absorber for
selectively **absorbing** and inhibiting transfer of extraneous
dyes in the wash)

IT Nonwoven fabrics

(bound with **polymeric amine dye absorber** for selectively **absorbing** and inhibiting transfer of extraneous dyes in the wash)

IT **Absorbents**

(for **dyes**; **polymeric amine dye absorber** for selectively **absorbing** and inhibiting transfer of extraneous dyes in the wash)

IT **Detergents**

(laundry; **polymeric amine dye absorber** for selectively **absorbing** and inhibiting transfer of extraneous dyes in the wash)

IT 59680-46-5, Kymene 557H 91315-75-2, Kymene 2064 336787-09-8, Luresin KNU

RL: MOA (Modifier or additive use); USES (Uses)

(**crosslinker**; **polymeric amine dye absorber** for selectively **absorbing** and inhibiting transfer of extraneous dyes in the wash)

IT 67953-56-4P, Bis(hexamethylene)triamine-**epichlorohydrin copolymer** 414870-23-8P, **Imidazole**-trimethylolpropane triglycidyl ether **copolymer**

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(**polymeric amine dye absorber** for selectively **absorbing** and inhibiting transfer of extraneous dyes in the wash)

IT 76930-03-5, Amberlite IRA 35 117197-37-2, Sokalan HP 56

RL: MOA (Modifier or additive use); USES (Uses)

(**polymeric amine dye absorber** for selectively **absorbing** and inhibiting transfer of extraneous dyes in the wash)

L57 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2002 ACS

2002:204078 Document No. 136:387354 Dye adsorption of activated carbon non-woven fabrics derived from cellulose viscose rayon. Huang, Ju-Ming; Wang, Chi-Hsian; Wang, Ing-Jing (Department of Fiber and Polymer Engineering, National Taiwan University of Science and Technology, Taipei, 10672, Taiwan). Journal of Polymer Research, 8(4), 267-272 (English) 2001. CODEN: JPOREP. ISSN: 1022-9760. Publisher: Polymer Society, Taipei.

AB Mesoporous activated carbon non-woven fabrics (ACNW) were prepd. by air/steam mixt. gas activation of cellulose viscose rayon fabrics. Pore characteristics of ACNW were measured with N using the N adsorption isotherm method at 77 K. The mol. structures and sizes of 3 acid dyes and 3 direct dyes in 3 dimensions were calcd. using the CACHE system. The adsorption properties of acid and direct dyes on ACNW were investigated in terms of mol. size of dyes and surface area and porosity of activated carbons fabrics. The adsorption amts. of dyes on ACNW were also compared with that on the granular activated carbon (GAC). The amts. of **adsorbed** acid and direct **dyes** on ACNW were much larger than those on GAC. The amts. of **adsorbed** acid and direct **dyes** on ACNW and GAC were also studied.

CC 40-10 (Textiles and Fibers)

Section cross-reference(s): 57, 60

IT **Dyes-**

(acid; characterization and dye adsorption of activated carbon non-woven fabrics derived from carbonized rayon)

IT **Adsorption-**

Nonwoven fabrics

Surface area

(characterization and dye adsorption of activated carbon non-woven

fabrics derived from carbonized rayon)

IT **Dyes**

(direct; characterization and dye adsorption of activated carbon
non-woven fabrics derived from carbonized rayon)

L57 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2002 ACS

2000:712662 Document No. 133:271757 Body fluid absorbent having
pH-indicating function. Kimura, Makiko (Kobayashi Pharmaceutical Co.,
Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2000279442 A2 20001010, 6 pp.
(Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-94057 19990331.

AB The absorbent, which detect body condition-dependent pH change due to
menstrual cycle, Trichomonas infection, rupture of the membranes, etc.,
from discharge, has a dye which changes its color at pH 4.5-5.5 and shows
color different between the pHs .gtoreq.4 in the 20-scale Munsell hue
circle. A pattern of a chlorophenol red-contg. ink compn. was
gravure-printed on a cellulose nonwoven fabric and laminated with a
nonwoven fabric comprising silicone-treated polyethylene-PET composite
fibers by embossing to give an absorbent sheet. The sheet showed Munsell
hues 10Y and 5B at pH 4.96 and pH 5.34, resp.

IC ICM A61F013-00

CC 63-7 (Pharmaceuticals)

IT Medical goods

Medical goods

(absorbents; body fluid **absorbent** having pH indicator

dyes to detect body condition-dependent pH changes)

IT Polyester fibers, biological studies

RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)

(biconstituent with polyethylene fibers, nonwoven fabric,
silicone-treated; body fluid **absorbent** having pH indicator

dyes to detect body condition-dependent pH changes)

IT Acid-base indicators

Body fluid

Dyes

(body fluid **absorbent** having pH indicator **dyes** to
detect body condition-dependent pH changes)

IT **Nonwoven fabrics**

(cellulose; body fluid **absorbent** having pH indicator

dyes to detect body condition-dependent pH changes)

IT Fibers

RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)

(cellulosic, nonwoven fabric; body fluid **absorbent** having pH
indicator **dyes** to detect body condition-dependent pH changes)

IT Polyolefin fibers

RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)

(ethylene, biconstituent with PET fibers, nonwoven fabric,
silicone-treated; body fluid **absorbent** having pH indicator

dyes to detect body condition-dependent pH changes)

IT Polyesters, biological studies

RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)

(fiber, biconstituent with polyethylene, nonwoven fabric,
silicone-treated; body fluid **absorbent** having pH indicator

dyes to detect body condition-dependent pH changes)

IT Absorbents

Absorbents

(medical; body fluid **absorbent** having pH indicator

dyes to detect body condition-dependent pH changes)

- IT Polysiloxanes, biological studies
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyethylene-PET composite nonwoven fabric treated with; body fluid **absorbent** having pH indicator **dyes** to detect body condition-dependent pH changes)
- IT 4430-20-0, Chlorophenol red
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(body fluid **absorbent** having pH indicator **dyes** to detect body condition-dependent pH changes)
- IT 9002-88-4, Polyethylene
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fiber, biconstituent with poly(ethylene terephthalate), nonwoven fabric, silicone-treated; body fluid **absorbent** having pH indicator **dyes** to detect body condition-dependent pH changes)
- IT 25038-59-9, Poly(ethylene terephthalate), biological studies
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fiber, biconstituent with polyethylene, nonwoven fabric, silicone-treated; body fluid **absorbent** having pH indicator **dyes** to detect body condition-dependent pH changes)
- L57 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2002 ACS
1998:430194 Document No. 129:109460 Polyamine **polymers** from alternating aliphatic polyketones, their manufacture, and their use. Kratz, Detlef; Lippert, Ferdinand; Schwab, Peter; Boeckh, Dieter; Perner, Johannes (BASF A.-G., Germany). Ger. Offen. DE 19654058 A1 19980625, 16 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1996-19654058 19961223.
- AB Polyamine **polymers** are manufd. by reaction of 1-alkene-CO alternating **copolymers** with NH₃ or RNH₂ (R = NH₂, OH, C1-10 alkyl, C6-20 aryl, C7-20 aralkyl, C7-20 alkaryl, or organosilane group), or reagents releasing NH₃ or RNH₂ and hydrogenation. These **polymers** are useful in textile industry, **detergents**, adhesives, cosmetics, metal processing and extg., paper industry, gasoline, and lubricants.
- IC ICM C08G073-06
ICS C08G061-12; B01F017-52; C09K015-30; D06M015-61; C08G059-50; C10M149-22; D06P001-52
- CC 35-8 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 38, 40, 43, 46, 51, 62
- ST polyamine **polymer** aliph polyketone **aminated** hydrogenated; alternating alkene carbon monoxide **copolymer aminated**; lubricant additive polyamine **polymer**; gasoline additive polyamine **polymer**; paper industry polyamine **polymer**; metal processing extg polyamine **polymer**; cosmetic polyamine **polymer**; adhesive polyamine **polymer**; ; **detergent** polyamine **polymer**; textile industry polyamine **polymer**
- IT Polyketones
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(aliph.; polyamine **polymers** from alternating aliph. polyketones)
- IT Cosmetics
(creams; polyamine **polymers** from alternating aliph. polyketones for skin creams)
- IT **Detergents**

- (dishwashing; polyamine **polymers** from alternating aliph. polyketones for additives for dishwashing **detergents**)
- IT Recycling
(metal; polyamine **polymers** from alternating aliph. polyketones for metal recycling)
- IT Polyamines
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine **polymers** from alternating aliph. polyketones)
- IT Sizes (agents)
(polyamine **polymers** from alternating aliph. polyketones for additives for sizes)
- IT Adhesives
Crosslinking agents
(polyamine **polymers** from alternating aliph. polyketones for adhesive **crosslinkers**)
- IT Complexing agents
(polyamine **polymers** from alternating aliph. polyketones for complexing agents)
- IT Corrosion inhibitors
(polyamine **polymers** from alternating aliph. polyketones for corrosion inhibitors)
- IT Dispersing agents
(polyamine **polymers** from alternating aliph. polyketones for dispersants)
- IT **Detergents**
Dyes
(polyamine **polymers** from alternating aliph. polyketones for dye-transfer inhibitors in **detergents**)
- IT Epoxy resins, uses
RL: POF (Polymer in formulation); USES (Uses)
(polyamine **polymers** from alternating aliph. polyketones for epoxy resin **crosslinkers**)
- IT Gasoline additives
(polyamine **polymers** from alternating aliph. polyketones for gasoline additives)
- IT Hair preparations
(polyamine **polymers** from alternating aliph. polyketones for hair prepns.)
- IT Lubricants
(polyamine **polymers** from alternating aliph. polyketones for lubricants)
- IT Paper
(polyamine **polymers** from alternating aliph. polyketones for papermaking auxiliaries)
- IT Cosmetics
Solubilizers
(polyamine **polymers** from alternating aliph. polyketones for solubilizers for cosmetics)
- IT Stabilizing agents
(polyamine **polymers** from alternating aliph. polyketones for stabilizers for polyoxyalkylenes)
- IT Polyoxyalkylenes, uses
RL: POF (Polymer in formulation); USES (Uses)
(polyamine **polymers** from alternating aliph. polyketones for stabilizers for polyoxyalkylenes)
- IT Textiles
(polyamine **polymers** from alternating aliph. polyketones for textile treatment)
- IT Colloids

- (protective; polyamine **polymers** from alternating aliph. polyketones for protective colloids)
- IT Polyoxyalkylenes, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(reaction products with aminated, hydrogenated alkene-carbon monoxide alternating **copolymers**, surface-active; polyamine **polymers** from alternating aliph. polyketones)
- IT Metals, processes
RL: PEP (Physical, engineering or chemical process); PROC (Process)
(refining; polyamine **polymers** from alternating aliph. polyketones for metal extg.)
- IT 111190-67-1DP, Carbon monoxide-ethylene alternating **copolymer**, aminated, hydrogenated
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polyamine **polymers** from alternating aliph. polyketones)
- IT 506-87-6DP, Ammonium carbonate, reaction products with alkene-carbon monoxide alternating **copolymers**, hydrogenated 7664-41-7DP, Ammonia, reaction products with alkene-carbon monoxide alternating **copolymers**, hydrogenated, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(polyamine **polymers** from alternating aliph. polyketones)
- IT 7803-49-8, Hydroxylamine, uses
RL: NUU (Other use, unclassified); USES (Uses)
(polyamine **polymers** from alternating aliph. polyketones for stabilizers for hydroxylamine)
- IT 7664-93-9DP, Sulfuric acid, salts with aminated, hydrogenated alkene-carbon monoxide alternating **copolymers**, preparation 25322-68-3DP, Polyethylene glycol, reaction products with aminated, hydrogenated alkene-carbon monoxide alternating **copolymers**
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(surface-active; polyamine **polymers** from alternating aliph. polyketones)

L57 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2002 ACS

1998:253111 Document No. 128:296184 Polycationic condensation products as dye-fixing additives for **detergents** and post-laundry treatment agents. Boeckh, Dieter; Jaeger, Hans-Ulrich; Lux, Juergen Alfred (BASF A.-G., Germany). Ger. Offen. DE 19643281 A1 19980423, 10 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1996-19643281 19961021.

AB The title agents, which suppress the transfer and detachment of dyes during and after washing, are prepd. by condensing piperazine (I), its derivs., or imidazoles with dihaloalkanes, epihalohydrins, and/or **diepoxides** in mol ratio 1:0.8-1.1 and optionally quaternizing with C4-25 alkylating agents; or by heating triethanolamine or triisopropanolamine with acid catalysts and quaternizing as above. Condensing I with **epichlorohydrin** in mol ratio 1:1 and quaternizing with 1.4 equiv. PhCH₂Cl (based on I) gave a product (mol. wt. 3500) as a 24% aq. soln. Using a softening rinse contg. 2% this product inhibited transfer of a dye (Direct Blue 71) from a cotton fabric by 99%, dye loss after 5 launderings being 7.2%.

IC ICM C11D003-42

ICS C11D003-26

CC 46-6 (Surface Active Agents and Detergents)

Section cross-reference(s): 35

ST dye transfer inhibitor laundering; piperazine

condensate inhibitor dye transfer; cationic polyelectrolyte inhibitor dye transfer; epichlorohydrin condensate inhibitor dye transfer; benzyl chloride quaternization polyelectrolyte

IT Polyelectrolytes

(cationic; polycationic condensation products as dye-fixing additives for **detergents** and post-laundrying treatment agents)

IT Epoxides

RL: TEM (Technical or engineered material use); USES (Uses)

(diepoxides, reaction products with heterocyclic amines; polycationic condensation products as dye-fixing additives for **detergents** and post-laundrying treatment agents)

IT Alkanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(halo, di-, reaction products with heterocyclic amines; polycationic condensation products as dye-fixing additives for **detergents** and post-laundrying treatment agents)

IT Detergents

(polycationic condensation products as dye-fixing additives for **detergents**)

IT Quaternary ammonium compounds, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymers; polycationic condensation products as dye-fixing additives for **detergents** and post-laundrying treatment agents)

IT Dyes

(transfer inhibitors; polycationic condensation products as dye-fixing additives for **detergents** and post-laundrying treatment agents)

IT 78-87-5D, 1,2-Dichloropropane, reaction products with heterocyclic amines
100-44-7D, Benzyl chloride, reaction products with piperazine-
epichlorohydrin condensates 102-71-6D, Triethanolamine, condensation products, quaternized 106-89-8D, **Epichlorohydrin**, reaction products with piperazine, quaternized 107-06-2D, 1,2-Dichloroethane, reaction products with heterocyclic amines
110-56-5D, 1,4-Dichlorobutane, reaction products with heterocyclic amines
110-85-0D, Piperazine, reaction products with **epichlorohydrin**, quaternized, uses 122-20-3D, Triisopropanolamine, condensation products, quaternized 140-31-8D, 1-Piperazineethanamine, reaction products with org. halides and/or **epoxides** 142-28-9D, 1,3-Dichloropropane, reaction products with heterocyclic amines 288-32-4D, Imidazole, reaction products with **epichlorohydrin** and piperazine
1464-53-5D, Bioxirane, reaction products with heterocyclic amines
7209-38-3D, 1,4-Piperazinedipropylamine, reaction products with org. halides and/or **epoxides**

RL: TEM (Technical or engineered material use); USES (Uses)

(polycationic condensation products as dye-fixing additives for **detergents** and post-laundrying treatment agents)

L57 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2002 ACS

1997:650525 Document No. 127:332743 Light conversion materials for use in agriculture. Narahara, Takeshi; Suda, Hiroshi; Takahashi, Hiroshi (Nippon Soda Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 09252668 A2 19970930 Heisei, 5 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1996-90448 19960319.

AB The title materials, useful in greenhouses, mulching films, reflecting plates, nets, fruit packages, etc., contain (A) fluorescent **dyes** having max. absorbance (λ_{max}) at 350-450 nm and max. fluorescence at 380-520 nm and (B) dyes having λ_{max} at 520-800 nm.

Thus, polyester nonwoven fabrics were treated with Mikawhite ATN 75, Disperse Blue FB (disperse dye, λ_{max} 632 nm) 50, and Na di(2-ethylhexyl)sulfosuccinate 180 g at 95-100.degree., washed, and dried to obtain blue fabrics showing light absorbance at 382 nm and luminescence at 419 nm.

- IC ICM A01G013-02
ICS A01G009-14; D06P005-00
CC 40-6 (Textiles and Fibers)
Section cross-reference(s): 38
IT Luminescent substances
Luminescent substances
(dyes; light conversion materials for use in agriculture contg. fluorescent **dyes** and light-absorbing **dyes**)
)
IT Polyester fibers, uses
RL: AGR (Agricultural use); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(fabrics; light conversion materials for use in agriculture contg. fluorescent **dyes** and light-absorbing **dyes**)
)
IT Agriculture and Agricultural chemistry
Nonwoven fabrics
(light conversion materials for use in agriculture contg. fluorescent **dyes** and light-absorbing **dyes**)
IT **Dyes**
(light-absorbing; light conversion materials for use in agriculture contg. fluorescent **dyes** and light-absorbing **dyes**)
IT **Dyes**
Dyes
(luminescent; light conversion materials for use in agriculture contg. fluorescent **dyes** and light-absorbing **dyes**)
)
IT 12224-27-0, Mikawhite ATN 197923-05-0, Disperse Blue FB
RL: MOA (Modifier or additive use); USES (Uses)
(light conversion materials for use in agriculture contg. fluorescent **dyes** and light-absorbing **dyes**)

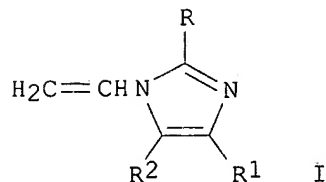
L57 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2002 ACS

1997:33971 Document No. 126:76517 Use of water-insoluble, crosslinked polymers having pyrrolidone,

imidazole, or pyridine side chains as dye-transfer inhibitors for detergents. Boeckh,

Dieter; Jaeger, Hans-Ulrich; Funhoff, Angelika; Schade, Christian; Stein, Stefan (BASF A.-G., Germany). Ger. Offen. DE 19519337 A1 19961128, 12 pp. (German): CODEN: GWXXBX. APPLICATION: DE 1995-19519337 19950526.

GI



✓ BASF
ref at least

- AB Water-insol., **crosslinked polymers** prepd. from 1-vinylpyrrolidone and(or) vinylimidazole derivs. I (R, R1, R2 = H, C1-4 alkyl, or Ph) or 4-vinylpyridine N-oxide and having .gtoreq.90% particles with size 0.1-500 .mu.m are useful as **dye-transfer inhibitors for detergents** contg. bleaching agents and .ltoreq.8% alkylbenzenesulfonates.
- IC ICM C11D001-83
- CC 46-5 (Surface Active Agents and Detergents)
- ST **pyrrolidone** group **polymer** manuf **detergent** additive; alkylbenzenesulfonate **detergent** dye transfer inhibitor; dye transfer inhibitor **detergent** bleach contg; **pyridine** group **polymer** manuf **detergent** additive; **imidazole** group **polymer** manuf **detergent** additive
- IT Bleaching agents
Detergents
Dyes
(use of water-insol., **crosslinked polymers** having **pyrrolidone**, **imidazole**, or **pyridine** side chains as dye-transfer inhibitors for **detergents**)
- IT 11138-47-9, Sodium perborate 15630-89-4, Sodium percarbonate
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(bleach; use of water-insol., **crosslinked polymers** having **pyrrolidone**, **imidazole**, or **pyridine** side chains as dye-transfer inhibitors for **detergents**)
- IT 162328-49-6P 185041-24-1P
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(use of water-insol., **crosslinked polymers** having **pyrrolidone**, **imidazole**, or **pyridine** side chains as dye-transfer inhibitors for **detergents**)
- IT 98-11-3D, Benzenesulfonic acid, C10-13 alkyl derivs., sodium salts, uses
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(use of water-insol., **crosslinked polymers** having **pyrrolidone**, **imidazole**, or **pyridine** side chains as dye-transfer inhibitors for **detergents**)
- L57 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2002 ACS
1996:653271 Document No. 125:303850 Laundry article for preventing dye carry-over and indicator therefor. Johnson, Kaj A.; Van Buskirk, Gregory; Gillette, Samuel M. (Clorox Company, USA; Precision Fabrics Group, Inc.). PCT Int. Appl. WO 9626831 A1 19960906, 33 pp. DESIGNATED STATES: W: CA, JP, MX; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1996-US2531 19960222. PRIORITY: US 1995-396853 19950301.
- AB A system for removing extraneous, random free-flowing dyes from laundry washing applications comprises a laundry article that can freely circulate among items being laundered. The laundry article comprises a dye absorber and a **dye transfer inhibitor** which are introduced into a wash liquor via a support matrix. The dye absorber maintains a relational assocn. with the support matrix in the wash liquor, whereas the **dye transfer inhibitor** is delivered up from the support matrix to the wash liquor and may be evenly distributed through the wash liquor. The laundry article provides a method for preventing the

✓ did have this? NO

redeposition of extraneous dyes onto other wash items, while simultaneously providing an indicator system for the manifestation of such scavenging process. A typical laundry article was manufd. by dipping a fabric composed of 54% wood pulp and 46% polyester fibers in a mixt. contg. Reten 203 (low-to-medium mol. wt., high-charge d. cationic resin) 100, Polycup 1884 (water-sol. **epichlorohydrin** polyamide) 50, and water 250 g, passing the impregnated fabric through 2 nip rollers, and cured 60 s at 300.degree.F.

IC ICM B32B007-00

ICS B32B027-00; D03D003-00; D03D015-00

CC 46-5 (Surface Active Agents and Detergents)

ST dye redeposition prevention system laundering; **epichlorohydrin** polyamide impregnated fabric; cationic **resin** impregnated fabric; pulp fabric impregnated dye redeposition preventer; polyester fabric impregnated dye redeposition preventer; fabric impregnated dye redeposition prevention system

IT Amphoteric substances

(dye absorbers; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Proteins, uses

Quaternary ammonium compounds, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(dye absorbers; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Gums and Mucilages

Oxidizing agents

(dye-**transfer inhibitors**; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Enzymes

Peptides, uses

Polyamides, uses

Polyamines

RL: TEM (Technical or engineered material use); USES (Uses)

(dye-**transfer inhibitors**; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Pulp, cellulose

(fabrics contg. polyester fibers and pulp fibers; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Dyes

(impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Polyester fibers, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

IT Surfactants

(amphoteric, dye-**transfer inhibitors**; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)

- IT **Surfactants**
(cationic, dye-transfer inhibitors; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(poly(amino acids), dye-transfer inhibitors; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT Carboxylic acids, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(polymers, impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(reaction products, with **epichlorohydrin**, dye absorbers; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT 120-93-4D, **Imidazolidinone**, derivs.
RL: TEM (Technical or engineered material use); USES (Uses)
(cationic **polymers crosslinked** by, dye absorbers; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT 67-48-1, Choline chloride 1398-61-4, Chitin 3327-22-8, QUAB 188 9002-98-6 9003-11-6, Ethylene oxide-propylene oxide **copolymer** 26336-38-9, Poly(vinylamine) 73071-59-7, Polycup 172 129807-53-0, Polycup 1884 182630-98-4 182971-62-6 182971-63-7 182971-66-0 182971-67-1 182971-68-2 182971-69-3 183074-46-6 183079-68-7
RL: TEM (Technical or engineered material use); USES (Uses)
(dye absorber; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT 106-89-8D, **Epichlorohydrin**, reaction products with polyamides
RL: TEM (Technical or engineered material use); USES (Uses)
(dye absorbers; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT 9000-30-0, Guar gum 9003-39-8, PVP K-30 9004-67-5, Methyl cellulose 9005-32-7, Alginic acid 11137-98-7, Magnesium aluminate 12304-65-3, Hydrotalcite 25232-42-2, Poly(vinylimidazole) 182482-80-0
RL: TEM (Technical or engineered material use); USES (Uses)
(dye-transfer inhibitor; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT 12619-70-4, Cyclodextrin
RL: TEM (Technical or engineered material use); USES (Uses)
(dye-transfer inhibitors; impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered garments with indicator for dye scavenging)
- IT 79-10-7D, Acrylic acid, esters, **polymers** 9012-76-4, Chitosan
RL: TEM (Technical or engineered material use); USES (Uses)
(impregnated fabrics contg. dye absorber and dye **transfer inhibitor** for preventing redeposition of dyes onto laundered

garments with indicator for dye scavenging)

L57 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2002 ACS

1996:607429 Document No. 125:225161 Preparation of agglomerated

crosslinked vinylimidazole copolymers for use as dye transfer inhibitors. Schade, Christian; Schneider, Karl-Heinrich (BASF A.-G., Germany). Ger: Offen. DE 19505750 A1 19960822, 8 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1995-19505750 19950220.

do I have this? ref at least

AB The title **copolymers**, useful as dye transfer

inhibitors in laundry **detergents**, are prepd. by radical

polymn. of a monomer mixt. (e.g., N-vinylimidazole,

N-vinylpyrrolidone, and N,N'-divinylethyleneurea) in a water-in-oil

emulsion contg. .gtoreq.1 emulsifier, azeotropic distn. of the water from

the emulsion, and isolation of the **copolymer** as agglomerated

finely divided particles, the emulsifier being a block **copolymer**

having hydrophobic and hydrophilic blocks, e.g., Hypermer B 246, an

oxirane-styrene block **copolymer**, or Tegopren 7006.

NO

IC ICM C08F026-06

ICS C08F002-32; B01F017-52; C11D003-37

ICA C08G081-00; C08G081-02; C08G077-46

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 35

ST vinylimidazole emulsion **polymn** dye transfer

inhibitor; block **copolymer** emulsifier **polymn**

vinylimidazole; **crosslinking** vinyimidazole **copolymn**

emulsion; laundry detergent dye transfer

inhibitor; imidazole vinyl **polymn** dye

transfer inhibitor

IT Emulsifying agents

(block **copolymers**; in prepn. of agglomerated

crosslinked vinylimidazole copolymers for use as dye

transfer inhibitors)

IT Dyes

(prepn. of agglomerated **crosslinked vinylimidazole**

copolymers as dye transfer inhibitors in

detergents)

IT Polymerization

(emulsion, of agglomerated **crosslinked vinylimidazole**

copolymers for use as dye transfer inhibitors

)

IT Detergents

(laundry, prepn. of agglomerated **crosslinked vinylimidazole**

copolymers for use as dye transfer inhibitors

in)

IT Siloxanes and Silicones, uses

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(polyether-, emulsifier; in prepn. of agglomerated **crosslinked**

vinylimidazole **copolymers** for use as dye transfer

inhibitors)

IT Polyethers, uses

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(siloxane-, emulsifier; in prepn. of agglomerated **crosslinked**

vinylimidazole **copolymers** for use as dye transfer

inhibitors)

IT 87865-39-2P, N,N'-Divinylethyleneurea-N-vinylimidazole **copolymer**

87865-40-5P, N,N'-Divinylethyleneurea-N-vinylimidazole-N-vinylpyrrolidone

copolymer

RL: IMF (Industrial manufacture); NUU (Other use, unclassified); TEM

- (Technical or engineered material use); PREP (Preparation); USES (Uses)
(agglomerated **crosslinked** particles prepd. by emulsion
polymn. for use as dye **transfer inhibitors**)
- IT 107311-90-0, Ethylene oxide-styrene block **copolymer**
117753-68-1, Hypermer B 246
RL: NUU (Other use, unclassified); TEM (Technical or engineered material
use); USES (Uses)
(emulsifier; in prepn. of agglomerated **crosslinked**
vinylimidazole **copolymers** for use as dye **transfer**
inhibitors)
- L57 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2002 ACS
1996:155557 Document No. 124:205653 **Crosslinked copolymers**
as dye **transfer inhibitors** in laundry
detergents. Detering, Juergen; Schade, Christian; Perner,
Johannes; Jaeger, Hans-Ulrich (BASF A.-G., Germany). Ger. Offen. DE
4421179 A1 19951221, 11 pp. (German). CODEN: GWXXBX. APPLICATION: DE
1994-4421179 19940617. ✓ ref?
- AB The title **copolymers** contain units derived from
1-vinylpyrrolidone (I), 1-vinylimidazole or a deriv., and/or
4-vinylpyridine N-oxide and have particle size 0.1-500 .mu.m. A
copolymer prepd. from I and N,N'-divinylethyleneurea was used as a
dye **transfer inhibitor**.
- IC ICM C11D003-37
ICS C08F226-06; C08F271-02
- ICA D06L001-12
- ICI C11D003-37, C11D003-39, C11D003-395; C08F226-06, C08F226-00, C08F220-28,
C08F220-60
- CC 46-5 (Surface Active Agents and Detergents)
- ST vinylpyrrolidone **copolymer crosslinking dye**
transfer inhibitor; vinylimidazole **copolymer**
crosslinking dye transfer inhibitor;
vinylpyridine **copolymer crosslinking dye**
transfer inhibitor; divinylethyleneurea
copolymer dye transfer inhibitor; ethyleneurea
divinyl **copolymer dye transfer inhibitor**;
laundry detergent dye **transfer inhibitor**;
amine polymer **crosslinking dye**
transfer inhibitor; particle size polymer dye
transfer inhibitor
- IT Particle size
(laundry **detergents** contg. dye **transfer**
inhibitors comprising **copolymers** with controlled)
- IT **Crosslinking**
(of **copolymers** as dye **transfer inhibitors**
in laundry **detergents**)
- IT **Dyes**
(**transfer inhibitors**; **crosslinked**
copolymers for use in laundry **detergents**)
- IT **Detergents**
(laundry, **crosslinked copolymers** as dye
transfer inhibitors in)
- IT **Amines, uses**
RL: NUU (Other use, unclassified); TEM (Technical or engineered material
use); USES (Uses)
(**polymers**, dye **transfer inhibitors**; with
controlled particle size for use in laundry **detergents**)
- IT 38743-73-6, N,N'-Divinylethyleneurea-1-vinylpyrrolidone **copolymer**
87865-39-2 87865-40-5, N,N'-Divinylethyleneurea-1-vinylimidazole-1-
vinylpyrrolidone **copolymer** 174350-91-5

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
(dye **transfer inhibitors**; with controlled particle size for use in laundry **detergents**)

L57 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2002 ACS

1995:994832 Document No. 124:59935 Metallomacrocyclic catalyst composition containing amphiphilic **polymer** for increased half-life in presence of peroxide source. Johnstone, Robert A. Walker; Stocks, Paul Anthony; Hardy, Frederick Edward; Pluyter, Johan Gerwin L.; Simpson, Anthony Joseph (Procter and Gamble Co., USA). PCT Int. Appl. WO 9524267 A1 19950914, 53 pp. DESIGNATED STATES: W: CA, CN, JP, MX, US, VN; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE. (English). CODEN: PIXXD2. APPLICATION: WO 1995-US1880 19950216. PRIORITY: EP 1994-301641 19940308.

AB Complexes of a transition metal catalyst selected from transition metal porphyrins [e.g., tetraphenylporphyrin Mn(III) chloride] and transition metal phthalocyanines with an amphiphilic **polymer** (e.g., **copolymer** of Na 4-styrenesulfonate and 2-vinylnaphthalene) have a longer half-life than the **polymer**-free catalyst in the presence of a peroxide source. The complexes are useful with peroxides for inhibiting dye transfer during laundering, for converting an unsatd. compd. such as cyclooctene or tetramethylethene to the corresponding **epoxide**, etc.

IC ICM B01J031-00

ICS C07D301-14; C07D301-19

CC 46-5 (Surface Active Agents and Detergents)
Section cross-reference(s): 45

ST porphin metal catalyst oxidn epoxidn; phthalocyanine metal catalyst oxidn epoxidn; sulfostyrene **polymer** complex catalyst oxidn epoxidn; dye **transfer inhibitor** peroxide catalyst; epoxidn catalyst **polymer** complex; peroxide dye **transfer inhibitor** epoxidn catalyst; manganese porphyrin catalyst oxidn epoxidn

IT **Dyes**

(complexes of **polymers** and metal phthalocyanines and porphyrins as catalysts for peroxides as oxidizing agents for preventing transfer of)

IT Epoxidation catalysts

(complexes of **polymers** and metal phthalocyanines and porphyrins as catalysts for peroxides for epoxidn. of olefins)

IT Oxidation catalysts

(complexes of **polymers** and metal phthalocyanines and porphyrins as catalysts for peroxides for oxidn. of dyes to prevent transfer during laundering)

IT Bleaching agents

(complexes of **polymers** and metal phthalocyanines and porphyrins as catalysts for peroxides in preventing dye transfer during laundering)

IT **Detergents**

(laundry, complexes of **polymers** and metal phthalocyanines and porphyrins as catalysts for oxidizing agents for preventing dye transfer during use of)

IT 12619-70-4D, Cyclodextrin, complexes with metal phthalocyanines and porphyrins 14325-24-7D, Manganese (II) phthalocyanine, complexes with amphiphilic **polymers** 29297-55-0D, Vinylimidazole-vinylpyrrolidone **copolymer**, complexes with metal phthalocyanines and porphyrins 32195-55-4D, complexes with amphiphilic **polymers** 67368-92-7D, complexes with amphiphilic **polymers** 172283-36-2D, complexes with metal phthalocyanines and porphyrins

- RL: CAT (Catalyst use); USES (Uses)
(catalysts; for use with peroxide source in dye transfer inhibition and olefin epoxidn.)
- IT 563-79-1, Tetramethylethylene 591-49-1, 1-Methylcyclohexene 931-88-4, Cyclooctene
RL: RCT (Reactant)
(complexes of **polymers** and metal phthalocyanines and porphyrins as catalysts for epoxidn. of)
- IT 286-62-4P, Cyclooctene **epoxide** 1713-33-3P, 1-Methylcyclohexene **epoxide** 5076-20-0P, Tetramethyloxirane
RL: IMF (Industrial manufacture); PREP (Preparation)
(complexes of **polymers** and metal phthalocyanines and porphyrins as epoxidn. catalysts in prepn. of)
- IT 7722-84-1, Hydrogen peroxide, uses 10332-33-9, Sodium perborate monohydrate
RL: TEM (Technical or engineered material use); USES (Uses)
(oxidizing agents; complexes of **polymers** and metal phthalocyanines and porphyrins as catalysts for use with)

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L58 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2002 ACS

2000:118395 Document No. 132:124535 Dye transfer-inhibiting colored concentrated fabric softener compositions, their preparation and inhibition of dye transfer to fabrics. Pergament, Nancy; Fox, Daniel Joseph; Hsu, Feng-Lung Gordon (Unilever PLC, UK). Can. Pat. Appl. CA 2242297, AA 19990103, 44 pp. (English). CODEN: CPXXEB. APPLICATION: CA 1998-2242297 19980702. PRIORITY: US 1997-887589 19970703; US 1998-45417. 19980320.

- AB The title compn. includes a fabric conditioning active 3-35, a dye transfer inhibiting compd. preferably poly(N-vinyl-2-pyrrolidone) (I) 0.1-10, and a colorant 0.0001-0.05%. An example fabric softener contained Accosoft 460 HC 12-20, Adogen 442 3-8, I 0.1-10.0, lactic acid 0.05-5, CaCl₂ 0.05-0.4, Ucarcide 250 0.02-1, perfume 0.2-1, Acid Yellow 17 0.0001-0.05%, and the balance water.
- IC ICM D06P005-04
ICS D06M015-356; D06M013-46
- CC 46-5 (Surface Active Agents and Detergents)
- ST polyvinyl pyrrolidone dye **transfer inhibitor**; fabric softener colored dye transfer inhibiting; yellow dye colored fabric softener; cationic active fabric softener
- IT **Surfactants**
(cationic; dye transfer-inhibiting fabric softener compns.)
- IT **Dyes**
Fabric softeners
Pigments, nonbiological
(dye transfer-inhibiting fabric softener compns.)
- IT **Amine oxides**
RL: MOA (Modifier or additive use); USES (Uses)
(**polymers**, dye **transfer inhibitor**; dye **transfer-inhibiting** fabric softener compns.)
- IT 9003-39-8, Poly(N-vinyl-2-pyrrolidone) 25232-42-2, Poly(vinylimidazole) 29297-55-0, N-Vinylimidazole-N-vinyl-2-**pyrrolidone** **copolymer**
RL: MOA (Modifier or additive use); USES (Uses)
(dye **transfer inhibitor**; dye **transfer** -inhibiting fabric softener compns.)

L58 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2002 ACS

1999:529232 Document No. 131:171893 **Detergent** compositions

containing an **aminosilicone** and a **polymer** inhibiting color transfer. Aubay, Eric; Joubert, Daniel; Popoff, Christine (Rhodia Chimie, Fr.). PCT Int. Appl. WO 9941347 A1 19990819, 27 pp. DESIGNATED STATES: W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (French). CODEN: PIXXD2. APPLICATION: WO 1999-FR269 19990208. PRIORITY: US 1998-PV74408 19980211.

AB The invention concerns the use, in **detergent** compns. for clothes, as agent for protecting colors of white and colored clothing, of an amine silicone assocd. with at least a org. **polymer** inhibiting color transfer (preferably polyvinylpyrrolidone).

IC ICM C11D003-37

ICS C11D003-00

CC 46-5 (Surface Active Agents and Detergents)

ST laundry **detergent** aminosilicone; polyvinylpyrrolidone dye **transfer inhibitor** laundry **detergent**

IT Polysiloxanes, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(amino; laundry **detergents** contg. **aminosilicones** and **polymers** inhibiting color transfer)

IT **Dyes**

(laundry **detergents** contg. **aminosilicones** and **polymers** inhibiting color transfer)

IT **Detergents**

(laundry; laundry **detergents** contg. **aminosilicones** and **polymers** inhibiting color transfer)

IT 9003-39-8, Sokalan HP 50

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(color-transfer inhibitors; laundry **detergents** contg. **aminosilicones** and **polymers** inhibiting color transfer)

IT 29297-55-0, N-Vinylimidazole-N-vinylpyrrolidone **copolymer**

60952-05-8, 4-Vinylpyridine-4-vinylpyridine N-oxide **copolymer**

156623-21-1D, [3-(2-Aminoethylamino)propyl]methylsilanediol-dimethylsilanediol **copolymer**, dimethylmethoxysilyl-terminated

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(laundry **detergents** contg. **aminosilicones** and **polymers** inhibiting color transfer)

L58 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2002 ACS

1996:196908 Document No. 124:264092 Amino group-containing

polymers as dye transfer inhibitors for use in

laundry **detergents**. Nakaya, Hiroshi; Watanabe, Toshuki (Lion Corp, Japan). Jpn. Kokai Tokkyo Koho JP 07316590 A2 19951205 Heisei, 8 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1994-136582 19940526.

AB The title **polymers**, useful for preventing dye transfer from colored fabrics during laundering, comprise poly(3-amino

-epsilon.-caprolactam), **copolymers** of 3-amino

-epsilon.-caprolactam with epsilon.-caprolactam, glycine, glutamic acid, or arginine, **copolymers** of epsilon.-caprolactam with

alpha.-dimethylamine-epsilon.-caprolactam, poly(vinylamine),

copolymers of vinylamine with ethylene, vinyl alc., or Na

acrylate, poly(allylamine), poly(diallyldimethylammonium chloride),

polyethylenimine, etc.

- IC ICM C11D003-37
ICS C11D003-26
- CC 46-5 (Surface Active Agents and Detergents)
- ST dye transfer inhibitor amino polymer
detergent; laundry detergent dye transfer
inhibitor; aminocaprolactam polymer dye
transfer inhibitor; polyamide amino dye transfer
inhibitor; caprolactam amino polymer dye
transfer inhibitor; vinylamine polymer dye
transfer inhibitor; polydiallyldimethylammonium chloride
dye transfer inhibitor; polyethylenimine dye
transfer inhibitor
- IT Polyamines
Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(dye transfer inhibitors for use in laundry
detergents)
- IT Dyes
(transfer inhibitors; laundry detergents
contg. amino group-contg. polymers as)
- IT Polyamides, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(amino-contg., dye transfer inhibitors for use in
laundry detergents)
- IT Detergents
(laundry, amino group-contg. polymers as dye
transfer inhibitors in)
- IT Amines, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(poly-, dye transfer inhibitors for use in laundry
detergents)
- IT 9002-98-6, Polyethylenimine 26062-79-3, Poly(diallyldimethylammonium
chloride) 26336-38-9, Poly(vinylamine) 29499-22-7, Vinyl
alcohol-vinylamine copolymer 30551-89-4, Poly(allylamine)
70394-25-1 71550-12-4, Poly(allylamine hydrochloride) 95797-35-6
169160-27-4 175221-28-0 175221-29-1 175221-30-4 175221-31-5
175284-73-8
RL: TEM (Technical or engineered material use); USES (Uses)
(dye transfer inhibitors for use in laundry
detergents)
- L58 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2002 ACS
1995:995283 Document No. 124:32582 Polymers as dye migration
inhibitors for detergents. Zirnstein, Michael; Trieselt,
Wolfgang; Oppenlaender, Knut; Nilz, Claudia; Kroener, Michael; Guenther,
Wolfgang (BASF A.-G., Germany). Ger. Offen. DE 4413720 A1 19951026, 12
pp. (German). CODEN: GWXXBX. APPLICATION: DE 1994-4413720 19940420.
- AB The title polymers, bearing aminal, semiaminal, or
aminal-acetal groups, are prepd. from polymers contg.
vinylamine units, aldehydes or ketones, and other compds. bearing NH
and/or OH groups. Adding 49.3 g 36.5% HCHO over 2 h to 62.5 g
1-(3-aminopropyl)imidazole stirred at 50.degree., stirring for 45 min,
adding 71.8 g aq. poly(vinylamine) over 1.5 h, adding .apprx.120 mL H2O,
and stirring at 50.degree. for 3 h gave a slightly turbid soln. When
cotton fabrics dyed with 0.3% C.I. Direct Red 81, 1.0% C.I. Direct Orange
39, or 3.0% C.I. Direct Black 22 were washed with undyed cotton in the
presence of the above soln. in a Launder-O-Meter at 60.degree. for 30 min,
retention of tinctorial strength by the dyed fabrics was 13, 36, and 78%,
resp.; vs. 0, 14, and 57, resp., with poly(vinylpyrrolidone) as inhibitor.
- IC ICM C08F271-00

ICS C11D003-37
ICI C08F271-00, C08F026-02, C08F020-06; C08F020-08, C08F020-16, C08F020-42, C08F020-52, C08F016-00
CC 46-6 (Surface Active Agents and Detergents)
Section cross-reference(s): 38
ST dye migration inhibitor **detergent**; polyvinylamine adduct
inhibitor dye **transfer**; formaldehyde adduct
inhibitor dye **transfer**; aldehyde adduct
inhibitor dye **transfer**; ketone adduct inhibitor
dye **transfer**; aminopropylimidazole adduct inhibitor
dye **transfer**; **aminal polymer**
inhibitor dye **transfer**; acetal polymer
inhibitor dye **transfer**
IT Acetals
Aminals
RL: TEM (Technical or engineered material use); USES (Uses)
(**polymer** derivs.; dye migration inhibitors for
detergents)
IT **Detergents**
Dyes
(**polymers** as dye migration inhibitors for **detergents**)
IT Aldehydes, uses
Ketones, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(reaction products, with poly(vinylamine); dye migration inhibitors for
detergents)
IT 50-00-0D, Formaldehyde, reaction products with poly(vinylamine)
107-15-3D, Ethylenediamine, reaction products with formaldehyde and
poly(vinylamine) 107-22-2D, Glyoxal, reaction products with
poly(vinylamine) 123-72-8D, Butyraldehyde, reaction products with
poly(vinylamine) 5036-48-6D, 1-(3-Aminopropyl)imidazole, reaction
products with formaldehyde and poly(vinylamine) 7664-41-7D, Ammonia,
reaction products with formaldehyde and poly(vinylamine) 26336-38-9D,
Poly(vinylamine), aminal and acetal derivs. 29792-49-2D,
Poly(vinylamine) hydrochloride, aminal and acetal derivs.
RL: TEM (Technical or engineered material use); USES (Uses)
(dye migration inhibitors for **detergents**)
L58 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2002 ACS
1995:928106 Document No. 123:314866 Manufacture of alkyl-1-vinylimidazole
polymers as dye **transfer inhibitors** for
laundry **detergents**. Schade, Christian; Jaeger, Hans-Ulrich;
Detering, Juergen (BASF A.-G., Germany). Ger. Offen. DE 4341072 A1
19950608, 9 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1993-4341072
19931202.
AB The title **polymers** are manufd. by radical **polymn.** of
(A) .gtoreq.1 alkyl-1-vinylimidazole 10-100, 1-vinylpyrrolidone,
1-vinylcaprolactam, 1-vinyltriazole, 1-vinylimidazole,
1-vinyloxazolidinone, or their mixt. 0-90, another monoethylenically
unsatd. monomer 0-30, and a monomer contg. .gtoreq.2 monoethylenically
unsatd. bonds. The **polymn.** is carried out in H2O, .gtoreq.1
Cl-4 alc. or their mixts. as solvents in the presence of mol. wt.
regulators. For example, 1% 2-methyl-1-vinylimidazole-1-vinylpyrrolidone
copolymer (prepn. given) in a laundry **detergent**
effectively prevented dye transfer in a cotton and polyester/cotton
washing test.
IC ICM C08F226-06
ICS C08F002-42; C11D003-37
ICA C08F271-02

*ref -
did
have?
NO*

ICI C08F226-06, C08F226-02, C08F220-34, C08F220-60
CC 35-4 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 46
ST alkylvinylimidazole **polymer** manuf dye **transfer inhibitor**; laundry **detergent dye transfer inhibitor**; methylvinylimidazole vinylpyrrolidone **copolymer** prepn dye transfer
IT **Dyes**
(transfer of, inhibitors of, alkyl-1-vinylimidazole polymers as; manuf. of alkyl(vinyl)imidazole polymers as dye transfer inhibitors for laundry detergents)
IT **Detergents**
(laundry, liq., contg. alkyl(vinyl)imidazole polymers; manuf. of alkyl(vinyl)imidazole polymers as dye transfer inhibitors for laundry detergents)
IT Polymerization
(radical, of alkyl-1-vinylimidazoles; manuf. of alkyl(vinyl)imidazole polymers as dye transfer inhibitors for laundry detergents)
IT 25086-88-8P, 2-Ethyl-1-vinylimidazole **polymer** 25610-91-7P, 2-Methyl-1-vinylimidazole-1-Vinylpyrrolidone **copolymer** 26983-77-7P, 2-Methyl-1-vinylimidazole **polymer** 170482-13-0P 170482-14-1P 170482-15-2P.
RL: IMF (Industrial manufacture); PREP (Preparation)
(manuf. of alkyl(vinyl)imidazole polymers as dye transfer inhibitors for laundry detergents)

L58 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2002 ACS

1995:820558 Document No. 123:202986 Dye-transfer-inhibiting systems for use in laundry **detergents**. Sterling, Marisa Elizabeth; Dinniwell, Alan Robert (Procter and Gamble Co., USA). PCT Int. Appl. WO 9503390 A1 19950202, 20 pp. DESIGNATED STATES: W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KG, KP, KR, KZ, LK, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, UZ, VN; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG. (English). CODEN: PIXXD2. APPLICATION: WO 1994-US6849 19940616. PRIORITY: US 1993-94418 19930719; US 1994-250128 19940603.

AB The title systems comprise 1 part dye-binding **polymer** selected from poly(vinylpyrrolidone), **polymers** contg. **amine** oxide groups, and N-vinylimidazole-N-vinylpyrrolidone **copolymers** and 2-250 parts oxyalkylene group-contg. **polymer** (e.g., polyethylene glycol) and/or cellulose deriv. (e.g., CM-cellulose).

IC ICM C11D003-37

ICS C11D003-22

CC 46-5 (Surface Active Agents and Detergents)

ST vinylpyrrolidone **polymer** dye **transfer inhibitor**; polyamine oxide dye **transfer inhibitor**; vinylimidazole **copolymer** dye **transfer inhibitor**; polyethylene glycol dye **transfer inhibitor**; CM cellulose dye **transfer inhibitor**; laundry **detergent dye transfer inhibitor**.

IT **Dyes**

(transfer inhibitors; laundry **detergent** compns. contg. **polymer** mixts. as)

IT **Detergents**

(laundry, dye-transfer inhibitor systems comprising **polymer** mixts. for)

IT 9003-39-8, Polyvinylpyrrolidone 9004-32-4 25322-68-3, Polyethylene glycol 29297-55-0, N-Vinylimidazole-N-vinylpyrrolidone **copolymer**

RL: MOA (Modifier or additive use); USES (Uses)
(dye-transfer inhibitors; laundry
detergents contg.)

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1995:806326 Document No. 123:203007 Dye-transfer

inhibitors for use with laundry **detergents** and fabric softeners. Kirk, Thomas C.; Schwartz, Curtis; Weinstein, Barry (USA). Can. Pat. Appl. CA 2127419 AA 19950113, 38 pp. (English). CODEN: CPXXEB. APPLICATION: CA 1994-2127419 19940705. PRIORITY: US 1993-90860 19930712.

AB Polyoxyethylene group-contg. polyurethanes (e.g., prepd. from polyethylene glycol, HMDI, and hexanol or from pentaerythritol, TDI, and polyethylene glycol mono-Me ether), acrylamide **polymers** (e.g., **copolymers** of N,N-dimethylacrylamide and hydroxyethyl methacrylate, N-methylacrylamide, or methacrylic acid), and **amino acid polymers** [e.g., poly(aspartic acid)] are useful for inhibiting dye transfer between fabrics during laundering and rinsing.

IC ICM C11D003-37

ICS' C11D001-722

CC 46-5 (Surface Active Agents and Detergents)

ST dye transfer inhibitor polymer laundering;
polyoxyethylene polyurethane dye transfer inhibitor;
acrylamide polymer dye transfer inhibitor;
polyaspartic acid dye transfer inhibitor; softener
fabric dye transfer inhibitor; laundry
detergent dye transfer inhibitor

IT Urethane polymers, uses

RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(dye-transfer inhibitors; for use with laundry
detergents and softeners)

IT Softening agents

(for fabrics; polymers as dye transfer
inhibitors for use with)

IT Dyes

(polymers as dye transfer inhibitors in
laundry detergents and softeners)

IT Detergents

(laundry, polymers as dye transfer
inhibitors for use with)

IT 3158-26-7D, Octyl isocyanate, reaction products with ethoxylated alcs. 9004-74-4D, reaction products with isocyanates 9059-74-9D, Hexamethylene diisocyanate-polyethylene glycol copolymer, reaction products with alkanols 25608-40-6, Poly(aspartic acid) 25917-35-5D, Hexanol, reaction products with isocyanate polymers 26063-13-8, Poly(aspartic acid) 28473-21-4D, Nonanol, reaction products with isocyanate polymers 29354-98-1D, Hexadecanol, reaction products with isocyanate polymers 36729-58-5D, Decanol, reaction products with isocyanate polymers 57514-87-1, N,N-Dimethylacrylamide-2-hydroxyethyl methacrylate copolymer 81752-44-5D, reaction products with ethoxylated alkanols 114955-51-0 168018-98-2D, reaction products with alkanols 168018-99-3
RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)

(dye-transfer inhibitors; for use with laundry
detergents and softeners)

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1995:629955 Document No. 123:12394 Grafted polyamide-polyamines and polyethylenimines and their preparation and use as dye transfer

inhibitors in laundry detergents. Detering, Juergen; Schade, Christian; Oppenlaender, Knut; Zirnstein, Michael; Scherr, Guenter; Trieselt, Wolfgang; Schwendemann, Volker (BASF A.-G., Germany). Ger. Offen. DE 4319934 A1 19941222, 12 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1993-4319934 19930616.

- AB Biodegradable graft **copolymers** are prepd. by radical **polymn.** of 1-vinylpyrrolidone, 1-vinyltriazole, 1-vinylimidazole, or their Me- or Et-substituted derivs. in the presence of water-sol. or water-dispersible polyamide-polyamines [e.g., adipic acid-N-(aminopropyl)ethylenediamine-N,N'-bis(aminopropyl)ethylenediamine **copolymer**] or polyethylenimines (e.g., polyaziridine). The **copolymers** are superior to poly(vinylpyrrolidone) as dye transfer inhibitors during laundering.
- IC ICM C08F283-00
ICS C08F283-04; C11D003-30
- ICA C08G073-02
- ICI C08F283-00, C08F226-06, C08F226-10
- CC **46-5** (Surface Active Agents and Detergents)
Section cross-reference(s): 35
- ST polyamide polyamine dye transfer inhibitor; polyamine graft dye transfer inhibitor; dye transfer inhibitor polyamine laundering; vinylpyrrolidone polymer dye transfer inhibitor; vinyltriazole polymer dye transfer inhibitor; vinylimidazole polymer dye transfer inhibitor; biodegrdn dye transfer inhibitor laundering
- IT **Dyes**
(biodegradable graft **copolymers** as dye transfer inhibitors in laundering)
- IT Polyamines
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(derivs., dye transfer inhibitors; prepn. and use as biodegradable additives in laundry detergents)
- IT Biodegradable materials
(dye transfer inhibitors prepd. by grafting vinyl derivs. of cyclic amines on polyamide-polyamines and polyamines)
- IT Polymerization
(graft, of vinyl derivs. of cyclic amines on polyamide-polyamines and polyamines in prepn. of dye transfer inhibitors)
- IT **Detergents**
(laundry, biodegradable graft **copolymers** as dye transfer inhibitors in)
- IT Polyamines
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(polyamide-, derivs., dye transfer inhibitors; prepn. and use as biodegradable additives in laundry detergents)
- IT Polyamides, uses
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)
(polyamine-, derivs., dye transfer inhibitors; prepn. and use as biodegradable additives in laundry detergents)
- IT 164008-78-0P, Adipic acid-N-(aminopropyl)ethylenediamine-N,N'-bis(aminopropyl)ethylenediamine-N-vinylpyrrolidone graft **copolymer** 164008-79-1P, Adipic acid-diethylenetriamine-N-vinylpyrrolidone graft **copolymer** 164008-80-4P, Adipic

acid-N-(aminopropyl)ethylenediamine-N,N'-bis(aminopropyl)
)ethylenediamine-N-vinylimidazole graft **copolymer**
164008-81-5P, Adipic acid-diethylenetriamine-N-vinylimidazole graft
copolymer 164008-82-6P, Aziridine-N-vinylimidazole graft
copolymer 164008-83-7P, Aziridine-N-vinylpyrrolidone graft
copolymer 164008-84-8P, Adipic acid-iminodiacetic
acid-triethylenetetramine-N-vinylimidazole graft **copolymer**
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP
(Preparation); USES (Uses)
(dye **transfer inhibitors**; prepn. and use as
biodegradable additive in laundry **detergents**)

L58 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2002 ACS

1995:456966 Document No. 123:173569 **Detergent** formulations for
prevention of dye transfer. Kiessling, D.; Jaeger, H. U.; Denzinger, W.
(BASF AG, Ludwigshafen, Germany). Tintoria, 91(6), 52-8 (Italian) 1994.
CODEN: TINCAW. ISSN: 0040-7984. Publisher: Edizioni Ariminum.

AB Addn. of poly(vinyl pyrrolidone) to **detergent** formulations based
on polyethylene glycol ethers, Na alkylbenzene sulfonate, Zeolite A, and
Na salts, contributed to improved retention of a reactive dye during
laundering tests. Additives of poly(vinyl imidazole), vinyl
pyrrolidone-acrylic acid, or a vinyl **pyrrolidone-vinyl**
imidazole copolymer were also evaluated. The amt. of
dye dissolved in the washing bath was dependent on **polymer**
concn. and water hardness. The best dye migration inhibitors were
poly(vinyl imidazole) and poly(vinyl pyrrolidone-vinyl imidazole). The
compn. of the dye has a significant effect on the interaction with the
additives.

CC 46-5 (Surface Active Agents and Detergents)

Section cross-reference(s): 40

ST polyvinylpyrrolidone **detergent** dye migration prevention;
polyvinylimidazole dye **transfer inhibitor** laundering

IT **Dyes, reactive**

Laundering

(**detergent** formulations contg. vinylpyrrolidone
polymers for prevention of dye transfer during laundering)

IT Zeolites, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(A, **detergent** formulations contg. vinylpyrrolidone
polymers for prevention of dye transfer during laundering).

IT **Detergents**

(laundry, **detergent** formulations contg. vinylpyrrolidone
polymers for prevention of dye transfer during laundering)

IT 138860-53-4, Reactive Brown 32

RL: PEP (Physical, engineering or chemical process); PROC (Process)

(**detergent** formulations contg. vinylpyrrolidone
polymers for prevention of dye transfer during laundering)

IT 98-11-3D, Benzenesulfonic acid, alkyl derivs., sodium salts 9003-39-8,

Poly(vinyl **pyrrolidone**) 25232-42-2, Poly(vinyl
imidazole) 25322-68-3D, Polyethylene glycol, fatty acid ethers

28062-44-4; Acrylic acid-vinyl **pyrrolidone copolymer**

29297-55-0, Vinyl **imidazole-vinyl pyrrolidone**

copolymer

RL: TEM (Technical or engineered material use); USES (Uses)

(**detergent** formulations contg. vinylpyrrolidone
polymers for prevention of dye transfer during laundering)

L58 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2002 ACS

1995:252441 Document No. 122:12568 Use of **copolymers** of vinyl
monomers and unsaturated amides as dye **transfer**

inhibitors in detergents. Antwerpen, Werner; Schindler, Hermann; Reinhardt, Gerd (Hoechst A.-G., Germany). Eur. Pat. Appl. EP 610846 A2 19940817, 8 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL. (German). CODEN: EPXXDW. APPLICATION: EP 1994-101799 19940207. PRIORITY: DE 1993-4304313 19930212.

AB **Copolymers** of .gtoreq.1 vinyl monomer contg. no carboxy or amide groups, .gtoreq.1 amide R1CH:CR2CONHR (R = H, methylol; R1 = H, C1-3 alkyl; R2 = H, Me), and, optionally, other monomers (e.g., a 10:10:80 acrylamide-ethylene-vinyl acetate **copolymer**) are useful in laundry **detergents** as dye **transfer inhibitors** which are more effective than poly(vinylpyrrolidone).

IC ICM C11D003-37

CC 46-5 (Surface Active Agents and Detergents)

ST acrylamide **copolymer** dye **transfer inhibitor**;
vinyl acetate **copolymer** dye **transfer inhibitor**;
; laundry **detergent** dye **transfer inhibitor**;
amide polymer dye **transfer inhibitor**

IT **Amides**, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(**polymers**; in laundry **detergents** as dye
transfer inhibitors)

IT **Dyes**

(**transfer inhibitors**; laundry **detergents**
contg. **amide** group-contg. vinyl **polymers** as)

IT **Detergents**

(laundry, dye **transfer inhibitors** comprising
amide group-contg. vinyl **polymers** in)

IT 37745-71-4, Acrylamide-ethylene-vinyl acetate **copolymer**

RL: TEM (Technical or engineered material use); USES (Uses)
(in laundry **detergents** as dye **transfer**
inhibitor)

L58 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2002 ACS

1994:658572 Document No. 121:258572 **Detergent** compositions
inhibiting dye transfer. Fredj, Abdennaceur; Johnston, James Pyott;
Willey, Alan David; Thoen, Christiaan Arthur Jacque; Convents, Andre
Christian; Hardy, Frederick Edward (Procter and Gamble Co., USA). Eur.
Pat. Appl. EP 596184 A1 19940511, 14 pp. DESIGNATED STATES: R: AT, BE,
CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE. (English). CODEN:
EPXXDW. APPLICATION: EP 1992-870181 19921106.

AB A catalyst selected from metallo porphins, porphyrins, and phthalocyanines
and their water-sol. or water-dispersible derivs. is used with a bleaching
agent (e.g., H2O2 or perborate) and a polyamine N-oxide [e.g.,
poly(4-vinylpyridine) N-oxide] as a dye-transfer-inhibiting system in
laundry **detergents**.

IC ICM C11D003-00

ICS C11D003-37; C11D003-39

CC 46-5 (Surface Active Agents and Detergents)

ST porphin bleach dye **transfer inhibitor**; porphyrin
bleach dye **transfer inhibitor**; phthalocyanine bleach
dye **transfer inhibitor**; bleach catalyst dye
transfer inhibitor; laundry **detergent** dye
transfer inhibitor; peroxide bleach dye **transfer**
inhibitor; amine oxide **polymer** dye
transfer inhibitor; polyvinylpyridine oxide dye
transfer inhibitor; manganese catalyst dye
transfer inhibitor; chromium catalyst dye
transfer inhibitor

IT Oxidation catalysts

(dye-transfer-inhibiting systems contg. peroxide bleach and, in

- detergents)
- IT **Dyes**
(transfer-inhibiting systems for, bleach-catalyst-polyamine oxide mixts. as)
- IT **Amines**
RL: USES (Uses)
(N-oxides, **polymers**, dye-transfer-inhibiting systems contg., in **detergents**)
- IT **Detergents**
(laundry, dye-transfer-inhibiting systems in, bleach-catalyst-polyamine oxide mixts. as)
- IT **Porphyrins**
RL: CAT (Catalyst use); USES (Uses)
(metal complexes, bleaching catalysts, dye-transfer-inhibiting systems contg., in **detergents**)
- IT 26219-77-2 121266-86-2 133170-60-2 158825-80-0
RL: CAT (Catalyst use); USES (Uses)
(bleaching catalysts, dye-transfer-inhibiting systems contg., in **detergents**)
- IT 7722-84-1, Hydrogen peroxide, uses
RL: USES (Uses)
(dye-transfer-inhibiting systems contg. bleaching catalysts and, in **detergents**)
- IT 9045-81-2, Poly(vinylpyridine) N-oxide 26715-00-4, Poly(4-vinylpyridine) N-oxide
RL: USES (Uses)
(dye-transfer-inhibiting systems contg., in laundry **detergents**)

L58 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2002 ACS

1994:536656 Document No. 121:136656 Stable liquid **detergent**

compositions containing dye **transfer inhibitors**.

Fredj, Abdennaceur; Goethals, Patrick Willy Maurits (Procter and Gamble Co., USA). Eur. Pat. Appl. EP 596185 A1 19940511, 9 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1992-870182 19921106.

- AB The storage stability of a liq. laundry **detergent** compn. contg. a fluorescent brightener and a dye-transfer-inhibiting polyamine N-oxide [e.g., poly(4-vinylpyridine) N-oxide] is improved by adding a non-arom. anionic **surfactant** such as a C12-15 alkyl sulfate.

IC ICM C11D003-00

ICS C11D003-37; C11D003-42

CC 46-5 (Surface Active Agents and Detergents)

ST polyamide oxide dye **transfer inhibitor**; amine oxide **polymer** dye **transfer inhibitor**; dye **transfer inhibitor** liq **detergent** stability; fluorescent brightener dye **transfer inhibitor**; polyvinylpyridine oxide dye **transfer inhibitor**; anionic dispersant dye **transfer inhibitor**; dispersant dye **transfer inhibitor detergent**; sulfate dispersant dye **transfer inhibitor**

IT Fluorescent brighteners

(liq. **detergents** contg. dye **transfer inhibitors** and, stable)

IT **Dyes**

(**transfer inhibitors** for, polyamine N-oxides as, liq. laundry **detergents** contg.)

IT **Amines**

RL: USES (Uses)

(N-oxides, **polymers**, dye **transfer**

- inhibitors, liq. detergents** contg., stable)
- IT Dispersing agents
(anionic, non-arom., for dye transfer agents and fluorescent brighteners in liq. **detergents**)
- IT **Detergents**
(laundry, liq., contg. dye transfer agents and fluorescent brighteners, storage-stable)
- IT 9045-81-2, Poly(vinylpyridine) N-oxide 26715-00-4, Poly(4-vinylpyridine) N-oxide
RL: USES (Uses)
(dye **transfer inhibitors**, liq. **detergents** contg. fluorescent brighteners and, stable)

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1994:536655 Document No. 121:136655 **Detergents** containing **polymers** which inhibit dye transfer. Fredj, Abdennaceur; Johnston, James Pyott; Labeque, Regine; Thoen, Christiaan Arthur Jacque (The Procter and Gamble Co., USA). Eur. Pat. Appl. EP 594893 A1 19940504, 20 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1992-203287 19921027.

AB The dye transfer inhibiting performance of a polyamine N-oxide is improved by a terephthalate-based soil release **polymer**. A liq. **detergent** compn. contained 0.3% poly(4-vinylpyridine) N-oxide and 0.4% terephthalate-based polyester.

IC ICM C11D003-37
CC **46-5** (Surface Active Agents and Detergents)
ST polyamine oxide dye **transfer inhibitor**; amine oxide **polymer dye transfer inhibitor**; dye **transfer inhibitor polymer** laundering; polyvinylpyridine oxide dye **transfer inhibitor**; terephthalate polyester dye **transfer inhibitor**; soil release **polymer dye transfer inhibitor**

IT Polyesters, uses
RL: USES (Uses)
(terephthalate, soil release agents and dye **transfer inhibitors, detergents** contg.)

IT **Dyes**
(transfer of, during laundering, **polymeric inhibitors** for)

IT **Amines**
RL: USES (Uses)
(N-oxides, **polymers**, dye **transfer inhibitors**, laundry **detergents** contg.)

IT Soilproofing
(agents, terephthalate polyesters as dye **transfer inhibitors** and, in **detergents**)

IT **Detergents**
(laundry, dye **transfer inhibitors** for, polyamine N-oxides and terephthalate polyesters as)

IT 9045-81-2, Poly(vinylpyridine) N-oxide 26715-00-4, Poly(4-vinylpyridine) N-oxide
RL: USES (Uses)
(dye **transfer inhibitors**, laundry **detergents** contg.)

IT 100-21-0D, 1,4-Benzenedicarboxylic acid, polyesters
RL: USES (Uses)
(soil release agents and dye **transfer inhibitors**, laundry **detergents** contg.)

L58 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2002 ACS

- 1994:536649 Document No. 121:136649 Use of water-soluble **copolymers** of acrylamidoalkanesulfonic acids as **dye-transfer inhibitors** in **detergents**. Antwerpen, Werner; Hille, Martin; Reinhardt, Gerd (Hoechst A.-G., Germany). Eur. Pat. Appl. EP 584709 A2 19940302, 9 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL. (German). CODEN: EPXXDW. APPLICATION: EP 1993-113207 19930818. PRIORITY: DE 1992-4227912 19920822.
- AB **Copolymers** of acrylamidoalkanesulfonic acids, vinylacetamides, and, optionally, other monomers (e.g., Hostadrill 3118, Dispersant M, Hostamer 3212, or an acrylamide-2-acrylamido-2-methylpropanesulfonic acid-N-vinylacetamide **copolymer**) are used in laundry **detergents** to inhibit dye transfer during laundering of colored fabrics.
- IC ICM C11D003-37
- CC 46-5 (Surface Active Agents and Detergents)
- ST acrylamidoalkanesulfonic **copolymer** dye transfer **inhibitor**; acrylamide **copolymer** dye transfer **inhibitor**; vinylacetamide **copolymer** dye transfer **inhibitor**; laundry detergent dye transfer **inhibitor**; sulfoalkylacrylamide **copolymer** dye transfer **inhibitor**
- IT **Amides**, uses
RL: USES (Uses)
(**polymers**, dye-transfer **inhibitors**, laundry **detergents** contg.)
- IT **Dyes**
(**transfer inhibitors** for, during laundering, acrylamidoalkanesulfonic acid **copolymers** as)
- IT **Detergents**
(laundry, dye-transfer **inhibitors** for, acrylamidoalkanesulfonic acid **copolymers** as)
- IT Sulfonic acids, uses
RL: USES (Uses)
(**polymers**, dye-transfer **inhibitors**, laundry **detergents** contg.)
- IT 71889-16-2 83457-33-4 105167-77-9 157055-00-0 157321-46-5,
Hostamer 3212
RL: USES (Uses)
(dye-transfer **inhibitors**, laundry **detergents** contg.)
- L58 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2002 ACS
- 1994:412305 Document No. 121:12305 **Polymers** as dye **transfer inhibitors** in laundry **detergent** compositions. Willey, Alan David; Hardy, Frederick Edward; Fredj, Abdennaceur; Thoen, Christiaan Arthur Jacque; Johnston, James Pyott; Maccorquedale, Findley; Busch, Alfred (The Procter and Gamble Co., USA). Eur. Pat. Appl. EP 579295 A1 19940119, 18 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1993-201198 19930426. PRIORITY: EP 1992-202168 19920715.
- AB The N-oxides of polyamines such as poly(4-vinylpyridine), poly(dimethylaminoethyl methacrylate), and poly(1-vinylimidazole) are used in **detergent** compns. to inhibit dye transfer during laundering of colored fabrics.
- IC ICM C11D003-00
ICS C11D003-37
- CC 46-5 (Surface Active Agents and Detergents)
- ST polyamine oxide dye **transfer inhibitor**; laundry **detergent** dye **transfer inhibitor**;

polyvinylpyridine oxide dye transfer inhibitor;
polyvinylimidazole oxide dye transfer inhibitor;
amine oxide polymer dye transfer
inhibitor

IT **Dyes**

(transfer inhibitors for, polyamine N-oxides as,
laundry detergents contg.)

IT **Detergents**

(laundry, dye transfer inhibitors for, polyamine
N-oxides as)

IT **Amines, uses**

RL: USES (Uses)

(polymers, N-oxides, dye transfer
inhibitors, laundry detergents contg.)

IT 25014-15-7D, Poly(2-vinylpyridine), N-oxides 25154-86-3D,
Poly(dimethylaminoethyl methacrylate), N-oxides 25232-41-1D,
Poly(4-vinylpyridine), N-oxides 25232-42-2D, Poly(1-vinylimidazole),
N-oxides

RL: USES (Uses)

(dye transfer inhibitors, laundry
detergents contg.)

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1994:412302 Document No. 121:12302 Use of polymers as dye

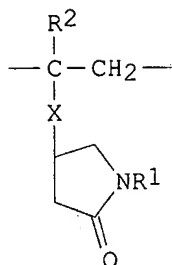
transfer inhibitors in laundering and detergents

containing the polymers. Sanner, Axel; Detering, Juergen;

Schade, Christian; Nguyen Kim Son; Trieselt, Wolfgang (BASF A.-G.,
Germany). Ger. Offen. DE 4224762 A1 19940203, 6 pp. (German). CODEN:

GWXXBX. APPLICATION: DE 1992-4224762 19920727.

GI



I

AB **Polymers** contg. units I (R₁ = H, C1-20 alkyl; R₂ = H, Me; X =
O₂C, NR₃CO, CO₂CH₂; R₃ = H, Me) are useful in laundry detergent
compsns. as dye transfer inhibitors.

IC ICM C11D003-37

ICS D06L001-12; C08L039-04; C08L033-14

ICI C11D003-37, C11D003-39; C11D003-42, C11D003-386

CC 46-5 (Surface Active Agents and Detergents)

ST **pyrrolidinone polymer dye transfer
inhibitor; laundry detergent dye transfer
inhibitor**

IT **Dyes**

(transfer inhibitors for, laundry
detergents contg.)

IT **Detergents**

(laundry, dye transfer inhibitors for,

polymers of pyrrolidinone derivs. as)
IT 616-45-5D, Pyrrolidin-2-one, derivs., polymers
RL: USES (Uses)
(dye transfer inhibitors, laundry
detergents contg.)